

TITLE

HIGH RESISTANCE POLY(3,4-ETHYLENEDIOXYTHIOPHENE)/POLY(STYRENE SULFONATE) FOR
USE IN HIGH EFFICIENCY PIXELLATED ELECTROLUMINESCENT
DEVICES

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ABSTRACT OF THE INVENTION

High resistance PEDT/PSS buffer layers are provided for use in
electroluminescent devices such as, e.g., OLEDs. In accordance with
10 another embodiment, there are provided OLEDs comprising high
resistance PEDT/PSS buffer layers. In accordance with a further
embodiment, methods have been developed for decreasing the
conductivity of a PEDT/PSS layer cast from aqueous solution onto a
substrate, by adding a cyclic ether co-solvent to the aqueous solution of
15 PEDT/PSS prior to casting. In one embodiment, there are provided
methods for decreasing the inherent conductivity of a PEDT/PSS layer
cast onto a substrate so that this material can be used as an intermediate
buffer layer in red, green, blue organic light emitting diodes (RGB OLEDs).